

IDS - 08/04/2003



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FORM PTO-1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. K-1436P Cont.		SERIAL NO. 10/606482							
INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use several sheets if necessary) (37 CFR 1.98(b))		APPLICANT Mehrotra et al.		FILING DATE 6/26/03		GROUP							
<b>U.S. PATENT DOCUMENTS</b>													
EXAMINER INITIAL		PATENT NUMBER				ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE			
JS		4	0	1	1	1	0	8	3/1977	Hellman et al.	148	11.5P	
		4	1	2	7	4	1	6	11/1978	Lumby et al.	106	73.2	
		4	2	2	7	8	4	2	10/1980	Samanta et al.	409	131	
		4	2	6	4	5	4	8	4/1981	Ezis	264	65	
		4	2	8	6	9	0	5	9/1981	Samanta	409	132	
		4	2	9	6	0	6	5	10/1981	Ishii et al.	264	325	
		4	3	8	8	0	8	5	6/1983	Sann et al.	51	307	
		4	4	0	1	6	1	7	8/1983	Ezis et al.	264	332	
		4	4	0	6	6	6	7	9/1983	Sann et al.	51	295	
		4	4	0	6	6	6	8	9/1983	Sann et al.	51	295	
JS		4	4	0	9	0	0	3	10/1983	Sann et al.	51	295	
<b>FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION</b>													
		DOCUMENT NUMBER				PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION			
JS		9	7	1	8	1	7	7	5/1997	PCT			X
		0	2	9	8	9	3	6	1/1989	Europe			X
	-	9	7	3	5	8	1	7	10/1997	PCT			X
		0	3	5	4	1	4	3	03/1991	Japan			Full English
	▼	3	1	9	3	6	6	6	08/1991	Japan			Full English
JS		3	9	3	8	6	4	4	05/1990	Germany			X
<b>OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)</b>													
JS		Sivasankaran et al., "Wear of Ceramic Tools in Machining Cast Iron", pp. 293-301											
JS		Beeghly et al., "Application-Specialized Ceramics: A Silicon Nitride for Machining Gray Cast Iron".											
JS		pp. 91-99; ASM Conference: Tool Materials, Scottsdale, AZ (February, 1987)											
JS		Janardhana Reddy et al., "Comparative Studies of Ceramic and Tungsten Carbide Tools for Machining Gray Cast Iron," pp. 161-171; Conference: Advanced Ceramics; India (March, 1990)											
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		FILING DATE 6/26/03						GROUP					
<b>U.S. PATENT DOCUMENTS</b>													
EXAMINER INITIAL		PATENT NUMBER						ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
JS		4	4	0	9	0	0	4	10/1983	Sann et al.	51	295	
		4	4	1	6	6	7	0	11/1983	Sann et al.	51	295	
		4	4	2	1	5	2	5	12/1983	Sann et al.	51	295	
		4	4	3	1	4	3	1	02/1984	Sann et al.	51	295	
		4	4	4	0	5	4	7	04/1984	Sann et al.	51	295	
		4	4	3	3	9	7	9	02/1984	Sann et al.	51	307	
		4	4	3	4	2	3	8	02/1984	Ezis et al.	501	98	
		4	4	4	1	8	9	4	04/1984	Sann et al.	51	295	
		4	4	4	9	9	8	9	05/1984	Sann et al.	51	295	
		4	4	9	7	2	2	8	02/1985	Sann et al.	82	1C	
JS		4	4	4	0	7	0	7	04/1984	Shimamori et al	264	65	
<b>FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION</b>													
		DOCUMENT NUMBER						PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
JS		4	0	0	0	7	7	7	08/1990	Germany			YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
JS		3	9	3	9	9	8	9	07/1990	Germany			YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)</b>													
JS		Tennenhouse et al., "Interaction of Silicon Nitride and Metal Surface", J. Am. Ceramic Soc. 68 [1] C30-C31 (1985)											
JS		Agranov et al., "Wear Behavior of Hot Pressed Silicon Nitride in Cutting of Cast Iron", Ind. Ceramics Vol. 8, No. 4 pp. 192-197 (1988)											
JS		Bhola et al., "ceramic Cutting tool Inserts", Key Engineering Materials, Vols. 122-124 (1996) pp. 235-246											
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		FILING DATE 6/26/03	GROUP

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
JS	4	5	6	3	4	3	3	01/1986	Yeckley et al.	501	97	
	4	5	7	5	4	4	9	03/1986	Lueth	419	26	
	4	6	0	7	0	1	7	08/1986	Wolfe et al.	501	98	
	4	6	0	9	6	3	3	09/1986	Fukuhara et al.	510	97	
	4	6	3	2	9	1	0	12/1986	Lee et al.	501	97	
	4	6	4	0	6	9	3	02/1987	Bhat et al.	51	295	
	4	6	5	0	4	9	8	03/1987	Buijan	51	309	
	4	6	5	2	2	7	6	03/1987	Burden	51	308	
↓	4	7	4	3	5	7	1	05/1988	Steinmann et al.	501	97	
	4	7	4	5	0	2	2	05/1988	Miyake et al.	428	216	
JS	4	7	6	9	3	5	0	09/1988	Nishioka et al.	501	98	

**FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION**

	DOCUMENT NUMBER							PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
												YES	NO
JS	0	1	0	7	9	1	9	05/1984	Europe			X	
↓	0	6	1	5	9	6	3	09/1994	Europe			X	
	0	4	9	7	3	5	5	08/1992	Europe			X	
↓	0	4	9	9	8	6	1	08/1992	Europe			X	
	0	4	7	2	2	5	6	08/1995	Europe			X	
JS	0	5	8	9	9	9	7	04/1994	Europe			X	

**OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)**

JS		Nishioka et al. "Mechanical Properties of $\text{Si}_3\text{N}_4$ Ceramics with $\text{ZrO}_2$ -addition under high temperature and observation of the micro-structure (date unknown)
JS		Falk et al. "Microstructure and Short Term Oxidation of Hot-Pressed $\text{Si}_3\text{N}_4/\text{ZrO}_2$ ( $=\text{Y}_2\text{O}_3$ ) Ceramics", J. Am. Ceram. Soc. 75 [1] (1992) pp.28-35
JS		Knutson-Wedel, $\text{Si}_3\text{N}_4$ Ceramics Formed by HIP Using Additions of $\text{ZrC}$ ., Ceramics Today-Tomorrow's Ceramics, Materials Science Monographs, 66B, Elsevier Sci. Publishers B.V. (1991)

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		FILING DATE 6/26/03			GROUP								
<b>U.S. PATENT DOCUMENTS</b>													
EXAMINER INITIAL		PATENT NUMBER				ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE			
JS		5	0	4	9	5	3	1	09/1991	Nakanishi et al.	501	98	
		5	0	7	9	1	9	8	01/1992	Edler et al.	501	98	
		5	0	2	4	9	7	6	06/1991	Mehrotra et al.	501	89	
		5	1	1	0	7	7	0	05/1992	Brandt et al.	501	89	
		5	1	2	2	4	8	5	06/1992	Akimune	501	92	
		5	1	7	1	7	2	3	12/1992	Moriguchi et al.	501	97	
		5	1	9	8	1	6	5	03/1993	Akimune et al.	264	65	
		5	2	5	0	4	7	7	10/1993	Baldoni, II et al.	501	95	
		5	2	9	6	0	0	8	03/1994	Moriguchi et al.	51	295	
		5	3	0	8	5	6	1	05/1994	Leimer et al.	264	65	
JS		5	3	1	6	8	5	6	05/1994	Suzuki et al.	428	446	
<b>FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION</b>													
		DOCUMENT NUMBER				PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION			
										YES	NO		
<b>OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)</b>													
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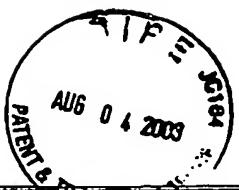


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<b>U.S. PATENT DOCUMENTS</b>													
EXAMINER INITIAL		PATENT NUMBER						ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
JS		5	3	2	6	7	3	07/1994	Mizuno et al.	501	97		
		5	3	7	0	7	1	6	12/1994	Mehrotra et al.	51	293	
		5	3	8	2	2	7	3	01/1995	Mehrotra et al.	51	307	
		5	4	1	1	9	2	3	05/1995	Suzuki et al.	501	97	
		5	4	3	9	8	5	5	08/1995	Rosenthal	501	97	
		5	4	3	2	1	3	2	07/1995	Dasgupta et al.	501	97	
		5	5	2	5	1	3	4	06/1996	Mehrotra et al.	51	307	
		5	6	6	8	0	6	9	09/1997	Sato et al.	501	97.2	
		5	5	7	1	7	6	0	11/1996	Pujari et al.	501	97	
		5	7	5	9	4	8	1	06/1998	Pujari et al.	264	655	
JS	R	E	3	5	5	3	8	06/1997	Akesson et al.	501	87		
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												YES	
												NO	
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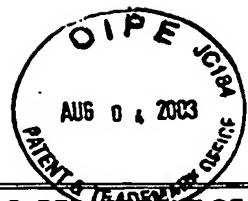
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FORM PTO-1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE							ATTY. DOCKET NO. K-1436P Cont.	SERIAL NO. 10/606482			
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<b>U.S. PATENT DOCUMENTS</b>													
EXAMINER INITIAL		PATENT NUMBER						ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
JS		4	7	1	1	6	4	4	12/1987	Yeckley et al.	51	307	
		4	8	4	3	0	3	9	06/1989	Akesson et al.	501	87	
		4	8	8	0	7	5	5	11/1989	Mehrotra et al.	501	96	
		4	6	7	0	0	2	4	06/1987	Bhat et al.	51	295	
		5	0	3	4	0	2	2	07/1991	Bhat et al.	51	307	
		5	4	5	5	0	0	0	10/1995	Seyferth et al.	419	36	
		5	6	2	8	5	9	0	05/1997	Beeghly et al.	407	114	
		4	2	6	4	5	5	0	04/1981	Ezis	264	85	
		5	6	9	1	2	6	1	11/1997	Takahashi et al.	501	97	
		5	7	0	5	4	4	9	01/1998	Hirao et al.	501	97.1	
JS		5	4	2	4	2	5	6	06/1995	Yoshimura et al.	501	97	
<b>FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION</b>													
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												YES	NO
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EXAMINER INITIAL	PATENT NUMBER					ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
JS	5	7	2	0	9	1	7	02/1998	Matsuura et al.	264	432
	5	4	5	3	2	3	2	09/1995	Hida et al.	264	65
	5	4	7	2	9	1	9	12/1995	Mitomo et al.	501	97
	5	4	4	5	7	7	6	08/1995	Honma et al.	264	65
	5	5	4	5	3	6	2	08/1996	Hirosaki et al.	264	65
	5	5	0	2	0	1	1	03/1996	Yamamoto et al.	501	97
	5	4	4	9	6	4	9	09/1995	Li et al.	501	97
	5	5	4	5	5	9	7	08/1996	Yeckley	501	98
	5	5	4	1	1	4	3	07/1996	Hirosaki et al.	501	92
	5	3	5	2	6	4	1	10/1994	Matsui et al.	501	92
JS	4	0	3	8	0	9	2	07/1977	Baumgartner	106	73.4
<b>FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION</b>											
	DOCUMENT NUMBER				PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION		
									YES	NO	
<b>OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)</b>											
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EXAMINER INITIAL		PATENT NUMBER				ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE			
JS		5	3	8	4	0	8	1	01/1995	Wotting et al.	264	65	
		5	3	8	4	2	9	2	01/1995	Matsui et al.	501	97	
		5	2	3	4	6	4	3	08/1993	Matsumoto	264	65	
		5	4	0	5	5	9	2	04/1995	Edler et al.	423	344	
		5	2	9	4	5	7	5	03/1994	Matsumoto	501	97	
		5	2	6	4	2	9	7	11/1993	Jindal et al.	428	698	
		5	6	8	3	4	8	1	11/1997	Chatterjee et al.	65	17.3	
JS		5	8	5	8	1	8	1	01/1999	Jindal et al.	204	192.15	
<b>FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION</b>													
		DOCUMENT NUMBER				PUBLICATION DATE	COUNTRY OR PATENT OFFICE		CLASS	SUBCLASS	TRANSLATION		
JS		4	1	3	6	1	7	4	05/1992	JAPAN			Full English
JS		6	2	5	2	1	9	2	03/1987	JAPAN			X
JS		9	1	1	4	0	1	7	09/1991	PCT			X
<b>OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)</b>													
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